

Abstract

A fuel injection valve for fuel injection valve systems of internal combustion engines is described, having an energizable actuating element (8, 18, 19), a valve closing element (14) which is axially movable along a valve longitudinal axis (15) and which works in conjunction with a rigid valve seat (13) that is provided on a valve seat element (10) so as to open and close the valve, and at least one exit opening (9) that is provided downstream from the valve seat (13). As the injection valve is of the inward-opening type, the opening movement of the valve closing element (14) is oriented away from the exit opening (9) and the closing movement of the valve closing element (14) is oriented toward the exit opening (9). Fuel flows completely through the interior of the valve closing element (14), and the valve seat element (10) has an inner trough-shaped recess (21), so that the opening movement of the valve closing element (14) is fuel-pressure-assisted, due to a flow inversion upstream of the valve seat (13).

(Figure 1)